

Notice of Allowability

Application No.

09/889,489

Examiner

Dana Ross

Applicant(s)

KOIKE, SHINJI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed March 4, 2004.
2. ☒ The allowed claim(s) is/are 1-3 and 5-12.
3. ☒ The drawings filed on 17 July 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Allowable Subject Matter

1. Claims 1-3 and 5-12 are allowed.
2. The following is an examiner's statement of reasons for allowance: The reasons for allowance of independent claim 8 is discussed in detail in the previous office action. Independent claims 1 and 7 incorporate allowable subject matter from the previous office action.

Independent claims 11 and 12 are allowable since there is no prior art that anticipates or renders obvious a numerically controlled machine tool for machining a work piece mounted on a work piece support unit by moving a spindle having a tool mounted thereon in directions along an X-axis, Y-axis and Z-axis with respect to the work piece as claimed in claims 11 and 12, specifically wherein the X-axis slider of the spindle support structure is driven in the direction along the X-axis by linear motors disposed along the guides on the upper and lower portions of the base, respectively, and each of the linear motors includes a stator and a mover arranged on the base and the X-axis slider in opposed relation to each other so that an attraction force of the stator acting on the mover reduces the load in gravitational direction exerted on the guide of the X-axis slider.

The closest prior art of record found is U.S. Pat. No. 5,662,568 (Lindem) as is discussed in detail in the previous office action. Lindem teaches a numerically controlled machine tool in which the X-axis slider is driven by upper and lower linear motors with the stator and mover arranged in opposed relation to each other. Lindem does not teach the machine tool with each of the linear motors including a stator and a mover arranged on the base and the X-axis slider in opposed relation to each other so that an attraction force of the stator acting on the mover reduces the load in gravitational direction exerted on the guide of the X-axis slider.

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Therefore Lindem does not anticipate the claimed inventions of claims 11 or 12.

There is no prior art that would render obvious the claimed invention of claims 11 or 12, either alone or in combination with Lindem.

Furthermore, there is no motivation found to modify Lindem such that each of the linear motors includes a stator and a mover arranged on the base and the X-axis slider in opposed relation to each other so that an attraction force of the stator acting on the mover reduces the load in gravitational direction exerted on the guide of the X-axis slider.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is (703) 305-7764. The examiner can normally be reached on Mon-Fri 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmr


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